

HITACHI

QR20861

iHITACHI

SOLID STATE COLOR TV

32FX41B 32UX51B 36FX42B 36UX52B 36CX35B

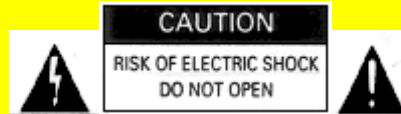
OPERATING GUIDE

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IMPORTANT

Follow all warnings and instructions marked on this iiprojection television.



**CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS COLOR TELEVISION TO RAIN OR MOISTURE.

NOTE: • There are no user serviceable parts inside the television.

• Model and serial numbers are indicated on the back side of the television.

POWER SOURCE:

This HITACHI color television is designed to operate on 120 volts 60 Hz, AC current.

Insert power cord into a 120 volt 60 Hz outlet.

TO PREVENT ELECTRIC SHOCK, DO NOT USE THE TELEVISION'S PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES AND GROUND TERMINAL CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE. NEVER CONNECT THE TELEVISION TO 50 Hz, DIRECT CURRENT, OR ANYTHING OTHER THAN THE SPECIFIED VOLTAGE.

NOTE: This television receiver will display television closed captioning ( or ) , in accordance with paragraph 15, 119 of the FCC rules.



CAUTION: Never remove the back cover of the television as this can expose you to very high voltages and other hazards. If the television does not operate properly, unplug the set and call your authorized dealer or service shop.

SAFETY TIPS**IMPORTANT SAFEGUARDS**

SAFETY POINTS YOU SHOULD KNOW ABOUT YOUR HITACHI TELEVISION

CAUTION:

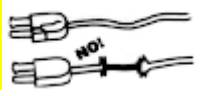
- Read all of these instructions.
- Save these instructions for later use.
- Follow all warnings and instructions marked on the television.

Our reputation has been built on the quality, performance, and ease of service of HITACHI televisions. Safety is also foremost in our minds in the design of these units. To help you operate these products properly, this section illustrates safety tips which will be of benefit to you. Please read it carefully and apply the knowledge you obtain from it to the proper operation of your HITACHI television. Please fill out your warranty card and mail it to HITACHI. This will enable HITACHI to notify you promptly in the improbable event that a safety problem should be discovered in your product model.

FOR YOUR PERSONAL SAFETY



1 This television is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.



2 When the power cord or plug is damaged or frayed, unplug this television set from the wall outlet and refer servicing to qualified service personnel.



3 Do not overload wall outlets and extension cords as this can result in fire or electric shock.



4 Do not allow anything to rest on or roll over the power cord, and do not place the television where the power cord is subject to traffic or abuse. This may result in a shock or fire hazard.



5 Do not attempt to service this television set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.



6 Never push objects of any kind into this television set through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the television set.



7 If the television has been dropped or the cabinet has been damaged, unplug this television set from the wall outlet and refer servicing to qualified service personnel.



8 If liquid has been spilled into this television set, unplug it from the wall outlet and refer service to qualified service personnel.



9 Do not subject your television to impact of any kind. Be particularly careful not to damage the picture tube surface.



10 Unplug this television from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.



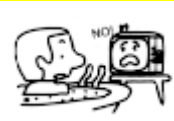
11-1 Do not place the television on an unstable cart, stand, or table. The television may fall, causing serious injury to a child or an adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer, or sold with the television. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.



11-2 An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

PROTECTION AND LOCATION OF YOUR SET

12 Do not use this television near water, for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.



- Never expose the television to rain or water. If the set has been exposed to rain or water, unplug the set from the wall outlet and refer servicing personnel.



13 Choose a place where light (artificial or sunlight) does not shine directly on the screen.



14 Avoid dusty places, since accumulated dust inside the chassis may cause failure of the set when high humidity persists.

15 The television has slots, or openings in the cabinet for ventilation purposes, to provide reliable operation of the receiver, and to protect from overheating. These openings must not be blocked or covered.



- Never cover the slots or openings with cloth or other material.



- Never block the bottom ventilation slots of the set by placing it on a bed, sofa, rug, etc.



- Never place the set near or over a radiator or heat register.



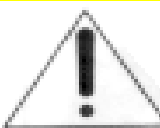
- Never place the set in a "built-in" enclosure, unless proper ventilation provided.

PROTECTION AND LOCATION OF YOUR SET

16-1 If an outside antenna is connected to the television set, be sure the antenna system is protected against voltage surges and built up static charges, Section 810 of the National Electrical Code, NFPA No. 70-1975, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrode, and requirements for the grounding electrode.

Click to see antenna grounding diagram.

16-2 **Note to CATV system installer:** (Only for television with CATV reception) This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

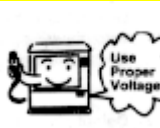


17 An outside antenna system should not be located in the vicinity of overhead power lines or other electrical lights or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.



18 For added protection for the television during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage due to lightning and power-line surges.

OPERATION OF YOUR SET



19 This television should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply at your home, consult your television dealer or local power company. For television sets designed to operate from battery power, refer to the operating instructions.



20 If the television does not operate normally by following the operating instructions, unplug this set

television set from the wall outlet and refer servicing to qualified service personnel. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the television set to normal operation.



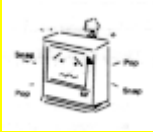
21 If your television is to remain unused for a period of time, (such as when going on a holiday), turn the television OFF and unplug it from the wall outlet.

IF THE TELEVISION DOES NOT OPERATE PROPERLY



22 If you are unable to restore normal operation by following the detailed procedure in your operating instructions, do not attempt any further adjustment. Unplug the television and call your dealer or service technician.

23 Whenever the television is damaged or fails, or a distinct change in performance indicates a need for service, unplug the set and have it checked by a professional service technician.



24 It is normal for some televisions to make occasional snapping or popping sounds, particularly when being turned on or off. If the snapping or popping is continuous or frequent, unplug the set and consult your dealer or service technician.

FOR SERVICING AND MODIFICATION



25 Do not use attachments not recommended by the television set manufacturer as they may cause hazards.

26 When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.



27 Upon completion of any service or repairs to the television set, ask the service technician to perform routine safety checks to determine that the television is in safe operating condition.

PICTURE CAUTIONS

Picture Burn Prevention

- Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to color television receivers. Such "PATTERN BURNS" constitute misuse and are NOT COVERED by your HITACHI Factory Warranty.

- When using Picture-in-Picture function, the sub-picture should not be left permanently in one corner of the screen or a "PATTERN BURN" may develop over a long period of time.

Public Viewing of Copyrighted Material

Public viewing of programs broadcast by TV stations and cable companies, as well as programs from other sources, may require prior authorization from the broadcaster or owner of the video program material.

ACCESSORIES

Check that you have the following accessories before disposing of the packing material.

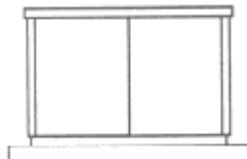
1. Remote Control Unit (See Part No. below.)
2. Two "AA" size, 1.5V batteries (For Remote Control Unit).

For information regarding how to obtain these accessories, please call TOLL FREE 1-800-448-2244 for the nearest HITACHI Authorized Parts Distributor in the continental United States. For Alaska and Hawaii, please contact your nearest HITACHI regional office.

PART NAME	PART NO.	ILLUSTRATION
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36CX35B CLU-432U REMOTE CONTROL	HL00722	CLU-432U
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36UX52B 36FX42B 32FX41B 32UX51B CLU-431UI REMOTE CONTROL	HL00721	CLU-431UI
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32V TELEVISION STAND SP316B (Not included, order separately)	H530022	 CUSTOM HITACHI TELEVISION STAND Excellent for VCR and videotape storage. Special features include curved smoke glass doors and an adjustable shelf. Available in black.
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32V TELEVISION STAND SP317B (Not included, order separately)	H530023 (upgrade)
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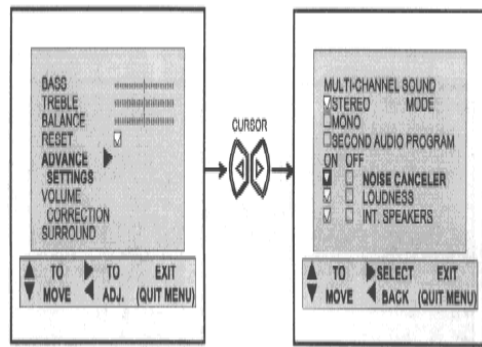
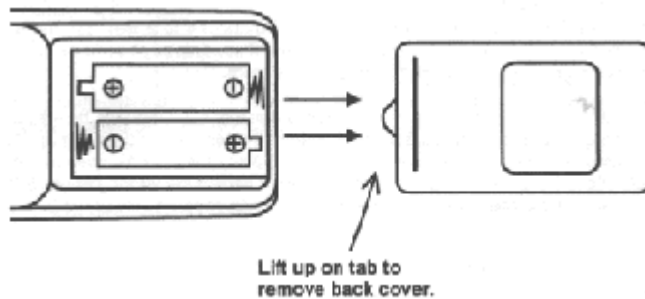
36V TELEVISION STAND SP351B (Not included, order separately)	H530024
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CAUTION: Television stand models SP316B and SP317B are designed for use only with a 32 inch or smaller television set. Television stand models SP351B are designed for use only with a 36 inch or smaller. Use with smaller equipment may result in instability, causing possible injury.

REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

1. Open the battery cover of the remote control by pushing the notched part of the cover with your fingers.
2. Insert two new "AA" size batteries in the remote. When replacing old batteries, push them towards the springs and lift them out.
3. Match the batteries to the (+) and (−) marks in the battery compartment.
4. Replace the cover.

**BOTTOM VIEW****CAUTIONS**

1. If your television set is to remain unused for a long period of time, for instance when you go on vacation, unplug the television from the wall outlet.
2. Do not subject the remote control to shocks such as dropping it on the floor, etc. Precision parts may be damaged.
3. Do not allow the remote control to become wet and avoid placing it in areas of high humidity. Do not leave it on or near a heater. Excess heat or moisture may cause the unit to cease operation.
4. If the batteries become exhausted, remote control operation may become erratic or stop altogether. Replace the old batteries with new "AA" types.

NOTES:

1. The CHANNEL NO., VOLUME, and OFF TIMER indicators are not displayed simultaneously.
2. To operate your TV, point the remote control at the remote sensor of the TV.

HOW TO SET UP YOUR NEW HITACHI COLOR TV**ANTENNA**

Unless your TV is connected to a cable TV system or to a centralized antenna system, a good outdoor color TV antenna is recommended for the best performance. However, if you are located in an exceptionally good signal area that is free from interference, and multiple image ghosts, an indoor antenna may be sufficient.

LOCATION

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows free flow of air to and from the perforated back cover of the set. To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot. For example, in direct sunlight or near a heating appliance, etc.

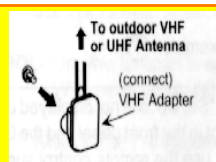
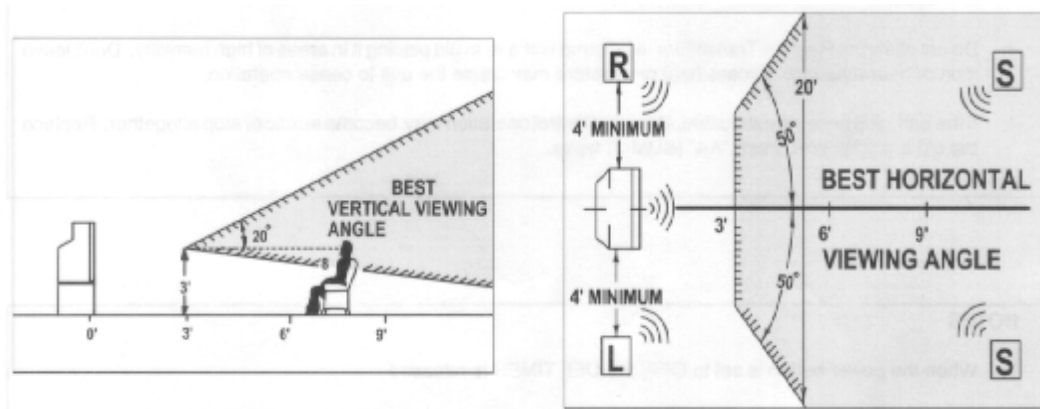
VIEWING

The major benefit of the HITACHI Color Television is its large viewing screen. To see this large screen at its best, test various locations in the room to find the optimum spot for viewing. The drawings give several

suggestions.

The best picture is seen by sitting directly in front of the TV and about 6 to 9 feet from the screen. During daylight hours, reflections from outside light may appear on the screen. If so, drapes or screens can be used to reduce the reflection or the TV can be located in a different section of the room.

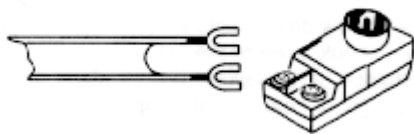
If the TV's audio output will be connected to a Hi-Fi system's external speakers, the best audio performance will be obtained by placing the speakers equidistant from each side of the receiver cabinet and as close as possible to the height of the picture screen center. For best stereo separation, place the external speakers at least four feet from the side of the TV, place the surround speakers to the side or behind the viewing area. Differences in room sizes and acoustical environments will require some experimentation with speaker placement for best performance.



CAUTION: Magnetic fields, such as those of external speakers, may cause the picture to distort if they are placed too close to the television. Move the magnetic field source away from the television until there is no picture distortion.

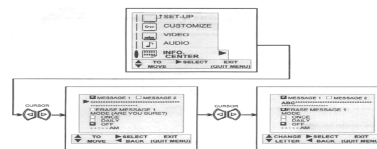
HOOK-UP CABLES AND CONNECTORS

Most video/audio connections between components can be made with shielded video and audio cables that have phono connectors. For best performance, video cables should use 75-Ohm coaxial shielded wire. Cables can be purchased from most stores that sell audio/video products. Below are illustrations and names of common connectors. Before purchasing any cables, be sure of the output and input connector types required by the various components and the length of each cable.



300-Ohm Twin Lead Connector

This outdoor antenna cable must be connected to an antenna adaptor (300-Ohm to 75-Ohm).



"F" Type 75-Ohm Coaxial Antenna Connector

For connecting RF signals (antenna or cable TV) to the antenna jack on the television.



Phono Connector

Used on all standard video and audio cables which connect to inputs and outputs located on the television's rear picture jack panel and front control panel.

S-Video (Super Video) Connector

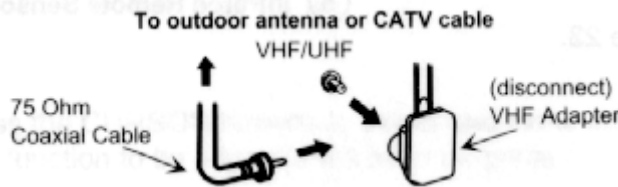
This connector is used on camcorders, VCRs and laserdisc players with an S-Video feature in place of the standard video cable to produce a high quality

ANTENNA CONNECTIONS

These sets are equipped with one VHF/UHF antenna terminal. The VHF/UHF terminal can be used for normal TV, cable TV (CATV), a TV game, etc.

1. VHF (75 Ohm) antenna/CATV

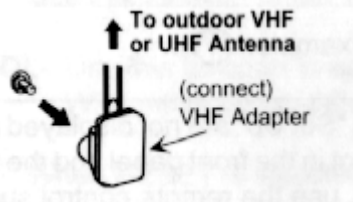
When using a 75-Ohm coaxial cable system, disconnect the VHF adapter from the VHF 75-Ohm receptacle and connect the outdoor antenna or CATV cable to a VHF 75-Ohm



receptacle.

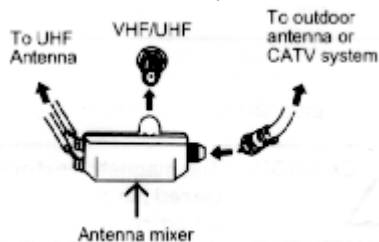
2. VHF (300 Ohm) antenna/UHF antenna

When using a 300-Ohm twin lead from an outdoor antenna disconnect the (VHF or UHF) indoor antenna leads from screws of the (VHF or UHF) adapter and connect outdoor (VHF or UHF) antenna leads to these screws of a (VHF or UHF) adapter.



3. When both VHF and UHF antennas are connected

Attach an optional ANTENNA MIXER to the TV antenna terminal and connect the cables to the ANTENNA MIXER.



Notes:

1. If an outdoor antenna/CATV is used, disconnect the indoor antenna. Ghosting and poor reception may result if both the indoor and outdoor antennas/CATV are connected at the same time.
2. Consult your dealer or service store for the ANTENNA MIXER and (VHF or UHF) adaptor.
3. The special converter (decoder) will be supplied by the cable company.

FRONT PANEL CONTROLS FOR 36CX35B, 36FX42B AND 36UX52B

- 12 -

Front Panel Illustration

See pages 24 and 25 for MENU, CURSOR and EXIT button operations.

A detailed explanation of the circled numbers is on page 11.

FRONT PANEL CONTROLS FOR 36CX35B, 36FX42B AND 36UX52B

FRONT VIEW

Front Panel Illustration

See pages 24 and 25 for MENU, CURSOR and EXIT button operations.

A detailed explanation of the circled numbers is on page 11.

FRONT PANEL JACKS AND CONNECTIONS

1 INPUT/EXIT Button

Press this button to select the current antenna source or VIDEO: 1, 2, 3. Your selection is shown in the top right corner of the screen. This button also serves as the EXIT button when in MENU mode.

2 VOLUME Level

Press these buttons for your desired sound level. The volume level will be displayed on the TV screen.

3 CHANNEL Selector

Press these buttons until the desired channel appears in the top right corner of the TV screen.

4 POWER Button

Press this button to turn the TV on or off.

NOTE: Your HITACHI TV will appear to be turned OFF if there is no video input when VIDEO: 1, 2, or 3 is selected. If you have no input to VIDEO 1, 2, or 3, press the INPUT button until the normal broadcast picture appears. (See page 24.) If the picture does not appear, the power is OFF.

5 REMOTE CONTROL INFRARED Sensor

Point your remote control at this area when selecting channels, adjusting volume, etc.

6 FRONT INPUT JACKS

Use these audio/video jacks for a quick hook-up from a camcorder or VCR to instantly view your favorite show or new recording. Press the INPUT button until VIDEO: 3 appears in the top right corner of the TV screen. If you have mono sound, insert the audio cable into the left channel jack.

NOTE: Front panel control CURSOR operation will not operate the FAMILY FAVORITES channel function.

The front panel jacks are provided as a convenience to allow you to easily connect a camcorder or VCR as shown in the following examples:

Front Panel Jacks and Connections Illustration

NOTE: Completely insert the connection cord plugs when connecting to front panel jacks. If you do not, the picture that is played back may be abnormal.

REAR PANEL JACKS

Rear Panel Jacks Illustration

Typical full feature setup. Follow connections that pertain to your personal entertainment system.

1 Antenna Inputs (36CX35B)

The VHF/UHF terminal can be used for normal TV, cable TV (CATV), a video game, etc.

2 Antenna Inputs (Except 36CX35B)

The remote control allows you to switch between two separate 75-Ohm RF antenna inputs, ANT A and ANT B. ANT A input can be displayed as a main picture or sub-picture. ANT B can only be displayed as a main picture. (ANT B cannot be displayed as a sub-picture.) The antenna output labeled "TO CONVERTER" allows the ANT A connection to pass directly to a different source such as a cable box.

3 Audio/Video Inputs 1, 2

The INPUT button will step through each video source and antenna source input each time it is pressed. Use the audio and video inputs to connect external devices, such as VCRs, camcorders, laserdisc players, etc. (If you have mono sound, insert the audio cable into the left channel jack.)

4 Monitor Out (Except 36CX35B)

These jacks provide fixed audio and video signals which are used for recording.

5 Audio to Hi-Fi

These jacks provide variable audio output to a separate stereo amplifier. With this connection, the audio to the stereo can be controlled by the television's main volume. Use these jacks for the SURROUND Left and Right channels. (See page 20.)

6 S-Video

Input 1 provides S-Video (Super Video) jacks for connecting equipment with S-Video output capability.

TIPS ON REAR PANEL CONNECTIONS

The S-Video connection is provided for high performance laserdisc players, VCRs etc., that have this feature. Use this connection in place of the standard video connection if your device has this feature.

If your device has only one audio output (mono sound), connect it to the left audio jack on the TV.

Refer to the operating guide of your other electronic equipment for additional information on connecting your hook-up cables.

A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot read its own video or line output (INPUT: 1 in the example on page 15 or 16). Refer to your VCR operating guide for more information on line input-output connections.

REAR PANEL CONNECTIONS (36CX35B ONLY)

Rear Panel Connections Illustration

Typical full feature set-up. Follow connections that pertain to your personal entertainment system.

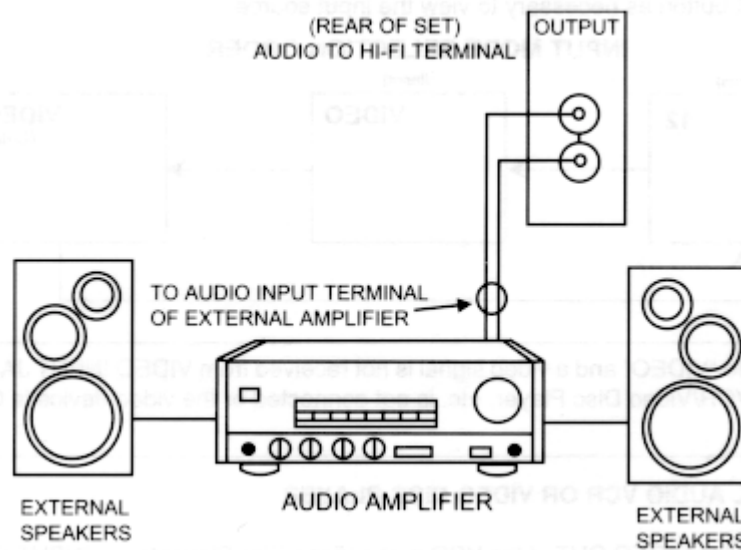
REAR PANEL CONNECTIONS (EXCEPT 36CX35B)

Rear Panel Connections Illustration

Typical full feature set-up. Follow connections that pertain to your personal entertainment system.

EXTERNAL CONNECTIONS**CONNECTING EXTERNAL AUDIO AMPLIFIER**

To control the audio level of an external audio amplifier with the remote control, connect the system as shown below.



NOTE: To prevent damage to the speaker and distorted sound, set the volume control of the audio amplifier lower and adjust the sound using the remote control of the TV set.

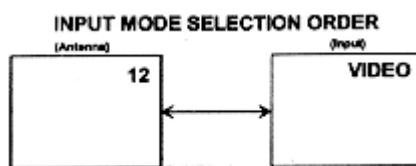
CONNECTING EXTERNAL VIDEO SOURCES

The exact arrangement you use to connect the VCR, camcorder, and laserdisc player to your TV set is dependent on the model and features of each component. Check the owner's manual of each component for the location of its video and audio inputs and outputs.

The following connection diagrams are offered as suggestions. However, you may need to modify them to accommodate your particular assortment of components and features. For best performance, video and audio cables should be made from coaxial shielded wire.

Before Operating External Video Source

The input mode is changed every time the INPUT button is pressed as shown below. Connect an external source to the INPUT terminal, then press the INPUT button as necessary to view the input source. (See page 24.)



NOTE: When the TV is set to VIDEO and a video signal is not received from VIDEO INPUT JACK on the jack panel of the TV (i.e., VCR/Laserdisc Player, etc. is not connected or the video device is OFF), the screen will be gray-blue.

CONNECTING A MONAURAL AUDIO VCR OR LASERDISC PLAYER

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack on the TV set below.
2. Connect the cable from the AUDIO OUT of the VCR or the laserdisc player to the INPUT (MONO)/L(AUDIO) jack.
3. Press the INPUT button to view the program from the VCR or laserdisc player. The VIDEO mode disappears automatically after approximately eight seconds.
4. Press the INPUT button to return to the previous channel.

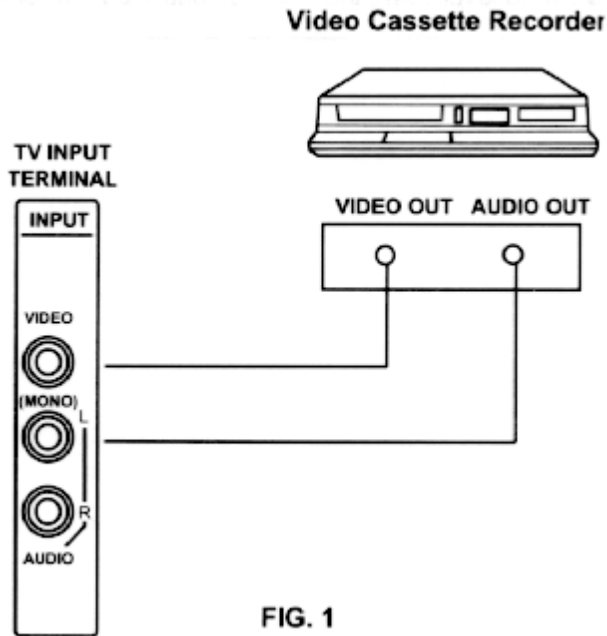


FIG. 1

CONNECTING A STEREO VCR OR STEREO LASERDISC PLAYER

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack on the TV set below.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the INPUT button to view the program from the VCR or laserdisc player. The mode VIDEO disappears automatically after approximately eight seconds.
5. Press the INPUT button to return to the previous channel.

Stereo VCR or Laserdisc Player Connection Illustration

NOTE: Completely insert the connection cord plugs when connecting to rear panel jacks. The picture that is played back may be abnormal if the connection is loose.

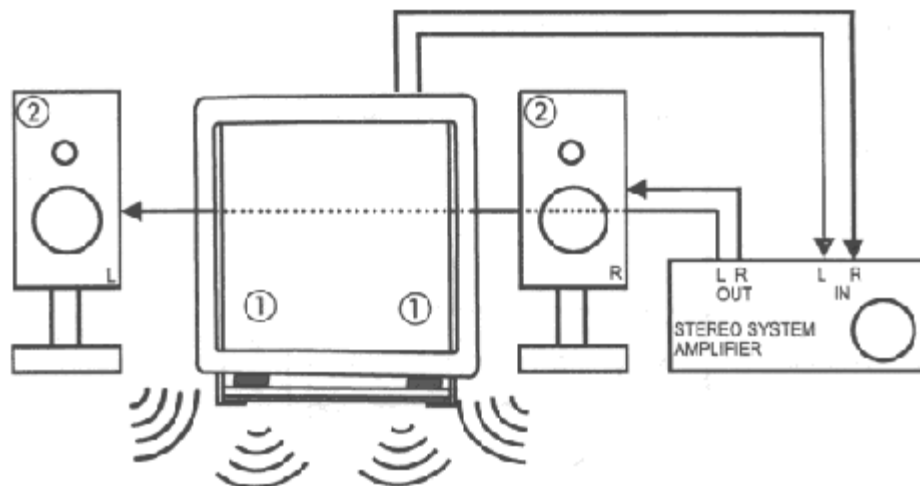
If you have an S-VHS VCR, use the S-INPUT cable in place of the standard video cable.

A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output. (INPUT: 1 in example on page 15 or 16.) Refer to your VCR operating guide for more information on line input-output connections.

AUDIO SYSTEM SET-UP

Match the numbers below to the diagram for speaker placement and refer to the table for the different surround sound requirements. (See pages 55 and 56 for SURROUND and SRS functions.)

- ① The television's internal speakers.
- ② These speakers are connected to a separate audio amplifier. Use the "Audio to Hi-Fi" output on the television.



For 36CX35B, 36FX42B, and 32FX41B only:

SURROUND FEATURE	REQUIRED CONNECTION	OPTIONAL CONNECTION	EFFECT
OFF	①	②	Receive mono and stereo sound.
MUSIC ① ②	--		At stereo input, sound of music will be louder. Surround channel added to left and right audio
MOVIE ① ②	--		amplifier speakers. Movie theater reproduction, surround channel added to left and right audio amplifier speakers.
SIMULATE	①	②	At mono input, sound will be louder.

For 36UX52B and 32UX51B only:

SRS (●) FEATURE	REQUIRED CONNECTION	OPTIONAL CONNECTION	EFFECT
ON	①	②	Exciting and realistic 3D sound experience
from			just two speakers.
OFF	①	②	Receive mono and stereo sound.

THE GENIUS REMOTE CONTROL (CLU-431UI)

In addition to controlling all the functions of your HITACHI Color TV, the new remote is designed to operate different types of VCR's, CATV (Cable TV), and satellite converters with one touch. Basic operation keys are grouped together in one area.

To operate your TV, point the remote control at the remote sensor of the TV and press the TV button. The remote will now control your television.

To operate your VCR, point the remote at the remote sensor of the VCR and press the VCR button. The remote will now control your VCR. (See page 31 for instructions on how to program the remote to control your VCR.)

To operate your cable/satellite box, point the remote at the remote sensor of the cable/satellite box and press the CABLE button. The remote will now control your cable/satellite box. (See page 33 for instructions on how to program the remote to control your cable/satellite box.)

Remote Control CLU-431UI Illustration

(1) These buttons allow the remote to control your TV, VCR, or cable/satellite box depending on which mode is chosen, as explained above.

(2), (3) LIGHT BUTTON

When you are in a dark room, press the light button (2) on the side of the remote to light up the buttons shown in (3). The light will stay on for about 8 seconds if the light button is not pressed again. These buttons will not appear to light if the room is too bright.

(4) PRECODED VCR BUTTONS

These buttons always transmit the chosen precoded VCR codes.

(5) TV/VCR BUTTON

When the remote is in the TV or VCR mode, this is the TV/VCR button. When the remote is in the CABLE mode, this is the A/B button.

THE GENIUS REMOTE CONTROL (CLU-432U)

In addition to controlling all the functions of your HITACHI Color TV, the new remote is designed to operate different types of VCR's, CATV (Cable TV), and satellite converters with one touch. Basic operation keys are grouped together in one area.

To operate your TV, point the remote control at the remote sensor of the TV and press the TV button. The remote will now control your television.

To operate your VCR, point the remote at the remote sensor of the VCR and press the VCR button. The remote will now control your VCR. (See page 31 for instructions on how to program the remote to control your VCR.)

To operate your cable/satellite box, point the remote at the remote sensor of the cable/satellite box and press the CABLE button. The remote will now control your cable/satellite box. (See page 33 for instructions on how to program the remote to control your cable/satellite box.)

Remote Control CLU-432U Illustration

(1) These buttons allow the remote to control your TV, VCR, or cable/satellite box depending on which mode is chosen, as explained above.

(2) TV/VCR BUTTON

When the remote is in the TV or VCR mode, this is the TV/VCR button. When the remote is in the CABLE/SATELLITE mode, this is the A/B button.

(3) PRECODED VCR BUTTONS

These buttons always transmit the chosen precoded VCR codes.

(4) HELP BUTTON

Press the button if help is needed to change menu settings, and our context sensitive help system will provide explanations and/or directions for whatever function your cursor is on at that time.

(5) SURROUND BUTTON

This button allows direct access to the SURROUND functions.

HOW TO USE THE REMOTE TO CONTROL YOUR TV

A detailed explanation of the circled numbers follows on pages 24 to 26.

CLU-432U Illustration

CLU-431UI Illustration

1 TV POWER Button

Press this button to turn the TV set on or off. If a Special Event Reminder is set, it will be displayed when the TV is first turned on. (See page 57.)

2 SLEEP Button

Press this button to display the SLEEP TIMER in the lower left corner of the screen. Every subsequent press of this button will add 15 minutes to the timer, up to a maximum of three hours.

3 MENU, CURSOR Buttons

All On-Screen Display features can be set or adjusted by using these buttons.

The MENU button will start the On-Screen Display.

The CURSOR buttons will highlight functions or adjust and set different features when MENU is pressed.

The CURSOR button will move PIP position when PIP is on.

CURSOR buttons will also give you access to FAMILY FAVORITE On-Screen Display.

4 CHANNEL SELECTOR Buttons

Enter two or three numbers to select channels. Enter "0" first for channels 1 to 9. For channels 100 and above, press the "1" button and wait for two seconds before pressing the last two digits of the channel.

Channel selection may also be performed by pressing CH up (▲) or down (▼).

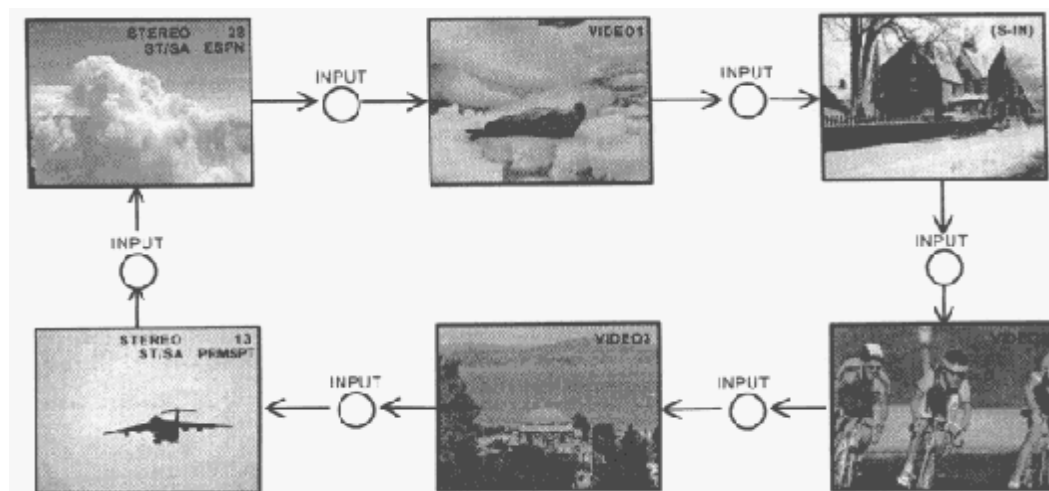
You may also use these buttons for channel scanning. Press and hold the CH up (▲) or down (▼) buttons and the TV will start quickly scanning through the channels. Release the CH up (▲) or down (▼) buttons when the TV scans to the channel you wish to watch and the TV will tune to that channel.

NOTE: The TV may not receive some channels if you are not in the correct SIGNAL SOURCE mode. (See page 39.)

5 INPUT Button

The INPUT button will select between both (only antenna A signal for the 36CX35B model) antenna signals and the four sets of video input jacks each time the button is pressed. Except for the 36CX35B model: If the Picture-in-Picture is on, the INPUT button will select between the four sets of video input jacks and both antenna sources when main channel is chosen with the PIP CH button (CLU-431UI remote only). If the sub-picture is chosen, the INPUT button will select between the four sets of video input jacks and the ANT A source (ANT B source cannot be displayed as a PIP Sub-Picture.)

For 36CX35B model: If the Picture-in-Picture (PinP) is on, the INPUT will not select any source signal on the main picture. However, the INPUT will alternate between the main signal source and the input source on the sub-picture.



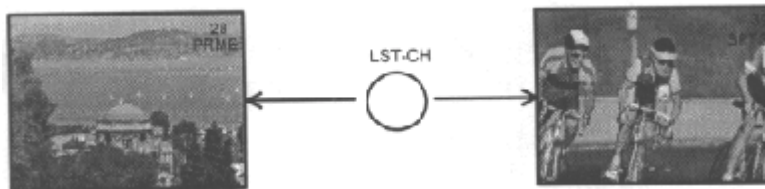
6 VOLUME, MUTE Buttons

Press the VOLUME up (▲) or down (▼) button until you obtain the desired sound level.

To turn the sound off instantly to answer the telephone, etc., press the MUTE button. Press the MUTE button again or press the VOLUME up (▲) button to restore the sound.

7 LAST CHANNEL (LST-CH) Button

Use this button to select between the last two channels viewed. (Good for watching two sporting events, etc.)



8 PICTURE-IN-PICTURE

See separate section on page 27 for a description.

9 LIGHT Button (CLU-431UI only)

When you are in a dark room, press this button to light up the volume and channel buttons. The light will stay on for about eight seconds if no buttons are pressed. These buttons will not appear to light if the room is too bright.

10 SURROUND Button (CLU-432U only)

Press the SURROUND button to directly access the SURROUND function. (See page 56.)

11 PIP CH Button (CLU-431UI only)

Use the PIP CH button to select between main picture and sub-picture tuning. The cyan background on the channel number will indicate which channel is being controlled.

12 EXIT Button

When in MENU mode, this button will exit all On Screen Displays.

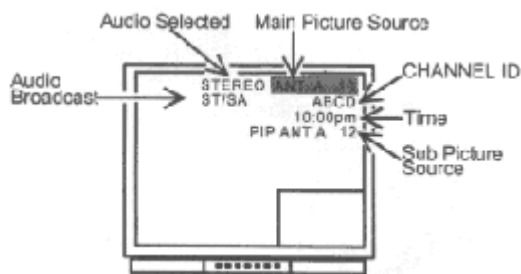
13 COMMERCIAL SKIP Button

Press this button when no menu is displayed to enable the COMMERCIAL SKIP (CS) function. In COMMERCIAL SKIP, you can change to any station you wish to view with CH ▲ or ▼ and the digit keys, but after 90 seconds of time out, it automatically changes back to the original station.

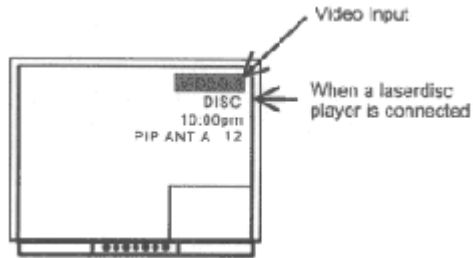
14 RECALL Button

Press this button when no menu is displayed when you want to check the channel being received, or if it has stereo (ST) or second audio (SAP).

You can also check the time, CHANNEL and VIDEO ID.



If a video input is used:



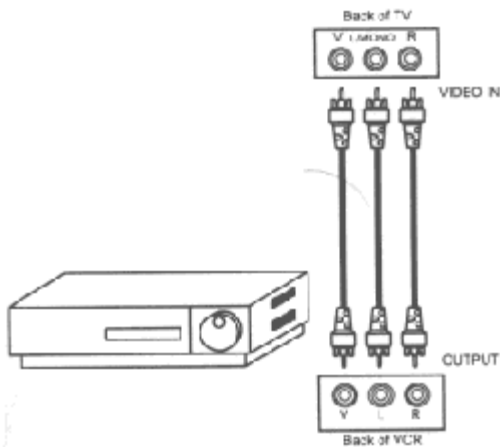
You can also use the RECALL button to quickly clear many of the other On-Screen Displays.

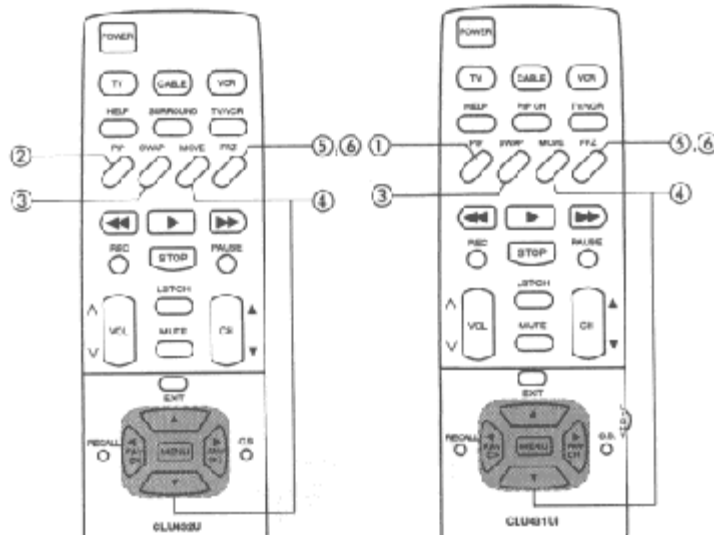
PICTURE-IN-PICTURE (PIP)

The Picture-in-Picture feature is convenient when you want to watch more than one program at the same time. You can watch a TV program while viewing other programs from the antenna source or any of the video inputs.

Your Hitachi Color TV incorporates Dual Tuner technology (except 36CX35B) designed for improved viewing enjoyment. This Dual Tuner feature allows you to view antenna inputs on both the main and sub-picture simultaneously, with separate tuning control for each. The Dual Tuner can operate with only one input (ANT A only) or two inputs (ANT A and ANT B).

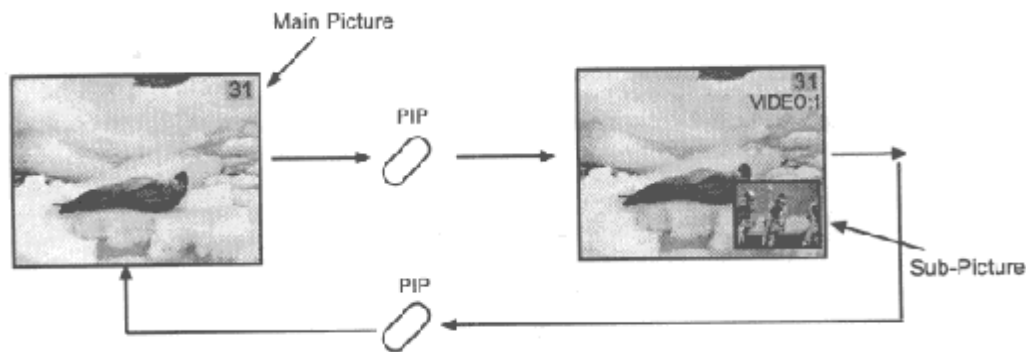
ANT A input can be viewed as the main picture and as the sub-picture. ANT B can only be viewed as a main picture. To select between main picture and PIP sub-picture tuning, press the PIP CH button on the remote. The cyan background will move with every press of the PIP CH button. When the cyan background is on the top channel display, channel tuning is for the main picture. When the cyan background is on the lower channel display, channel tuning is for the PIP sub-picture. This method of picture tuning is the same for one antenna input (ANT A only) and two antenna inputs (ANT A and ANT B).





1 PIP button (except 36CX35B)

Press the PIP button and a sub-picture appears in one corner of the screen. Press the button again to remove the sub-picture from the screen. Use the PIP CH button to select between main and sub-picture tuning control (indicated by the cyan background on the channel numbers). Press the INPUT button when sub-picture channel tuning is being controlled, to change between VIDEO: 1, 2, or 3, and ANT A antenna source (ANT B source cannot be viewed as a sub-picture).

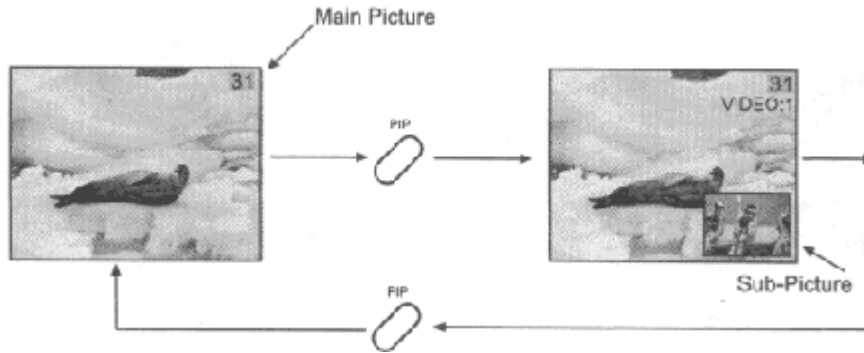


NOTE: Model 36CX35B does not incorporate Dual Tuner technology.

When PIP is displayed, the CURSOR button will not activate the FAMILY FAVORITE menu. The CURSOR button will move the PIP position.

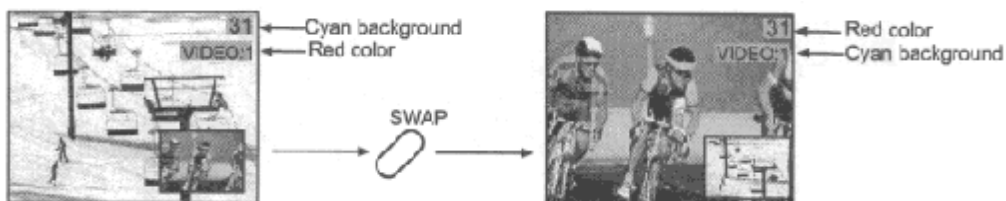
2 PIP button (Model 36CX35B only)

Press the PIP button and a sub-picture appears in one corner of the screen. Press the button a second time to remove the sub-picture from the screen. The TV channel will always be either the main picture or the sub-picture.



3 SWAP button

If you wish to switch what is being shown on the main picture to the sub-picture, press the SWAP button.



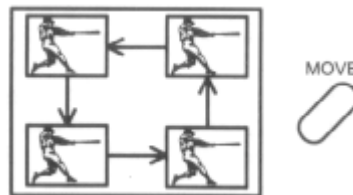
NOTE: The SWAP function will not operate if ANT B input is set as the main channel (ANT B input cannot be displayed as a sub-picture.)

Model 36CX35B does not have ANT B input.

4 MOVE button

To move the sub-picture to another corner, press the MOVE button. The sub-picture moves one step counter-clockwise every time the MOVE button is pressed. (Example below illustrates the MOVE operation for initial shipping conditions. If you have customized a PIP position, the MOVE operation may differ slightly from the example.)

It is also possible to customize the PIP position. To do this, wait until the On-Screen Display disappears (after eight seconds) and then use the cursor ▲, ▼, ►, ◀ buttons.

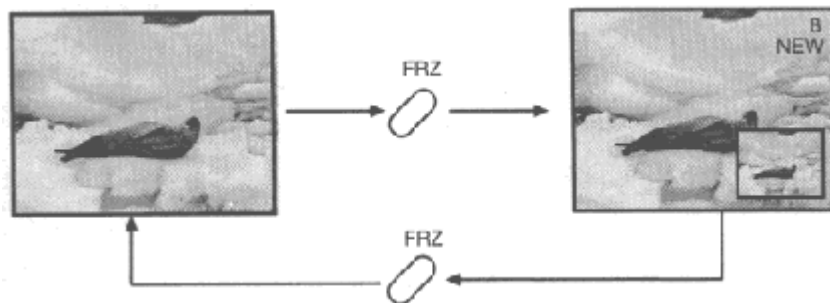


5 FREEZE (FRZ) Button

If you wish to freeze the sub-picture, press the FRZ button. This is convenient when trying to write down the address for a mail order company, recording statistics for a sporting event, etc. To return the picture to motion, press the FRZ button again.

6 QUICK FREEZE (FRZ) Button

Press this button without a sub-picture to freeze the picture you are currently viewing. Press this button again to return to normal viewing.



CAUTION: A pattern burn may develop if the sub-picture is left in the same corner permanently. If the PIP feature is used frequently, occasionally shift the sub-picture to a different corner. You may also vary its position using the CURSOR , , , or  buttons.

USING THE REMOTE TO CONTROL VCR FUNCTIONS

CLU-432U Illustration

CLU-431UI Illustration

Operating the pre-coded function for your VCR.

This remote is designed to operate different types of VCRs. You must first program the remote to match the remote system of your VCR. (Refer to page 34.)

1. Turn ON your VCR.
2. Aim the remote control at the front of your VCR.
3. Press the VCR button to switch to the VCR pre-coded mode.
4. Hold down the VCR button on the remote, enter the two digit preset code that matches your VCR as shown on page 34. The remote will turn off your VCR when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your VCR. If the VCR does not turn off after five seconds, try a different two digit preset code.
5. The remote will now control your VCR.

NOTES:

1. If your VCR cannot be operated after performing the above procedures, your VCR code has not been precoded into the remote.
2. In the unlikely event that your VCR cannot be operated after performing the above procedures, please consult your VCR operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure stated above.
4. If your VCR does not have a power function, the remote will issue the CHANNEL UP function.
5. The MENU button will act as the VCR MENU button for HITACHI VCRs.
6. The LST-CH button will act as your VCR ENTER button if required.
7. The SLEEP button will act as your VCR '100' button if required.

1 VCR Button

This button allows the remote to control your VCR by setting it to VCR mode.

2 PRECODED VCR Buttons

These buttons transmit the chosen precoded VCR codes. For some VCRs, you must press the RECORD button twice to record a program.

3 EXCLUSIVE TV buttons

These buttons are for operating the TV.

NOTE: Refer to the instruction manual of the VCR for operation of the buttons exclusively for the VCR.

USING THE REMOTE TO CONTROL CABLE BOX/SATELLITE FUNCTIONS

CLU-432U Illustration

CLU-431UI Illustration

Operating the pre-coded function for your cable/satellite box.

This remote is designed to operate different types of cable boxes and satellite systems. You must first program the remote to match the remote system in your cable/satellite box. (Refer to page 34.)

1. Turn ON your cable/satellite box.
2. Aim the remote control at the front of your cable/satellite box.
3. Press the CABLE button on the remote to switch to cable/satellite box mode.
4. Hold down the CABLE box button on the remote, enter the two digit preset code that matches your cable/satellite box as shown on page 34. The remote will turn off your cable/satellite box when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your cable/satellite box. If the cable/satellite box does not turn off after five seconds, try another two digit preset code.
5. The remote will now control your cable/satellite box.

NOTES:

1. If your cable/satellite box cannot be operated after performing the above procedures, your cable/satellite box code has not been precoded into the remote.
2. In the unlikely event that your cable/satellite box cannot be operated after performing the above procedures, please consult your cable/satellite box operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure stated above.
4. If your cable/satellite box does not have a power function, the remote will issue the CHANNEL UP function.
5. The LST-CH button will act as the cable/satellite box ENTER button if required.
6. The SLEEP button will act as your cable/satellite box '100' button if required.

1 CABLE Button

This button allows the remote to control your cable/satellite box by setting it to cable/satellite mode.

2 PRECODED CABLE/SATELLITE BOX buttons

These buttons transmit the chosen precoded cable/satellite codes.

3 EXCLUSIVE TV buttons

These buttons are for operating the TV.

CABLE/SATELLITE, AND VCR CODES

CABLE BRAND	CODES
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ABC	00, 07, 08, 18, 19, 21, 37, 38, 53
Antronix	40
Archer	12, 25, 40
Belcor	33
Cable Star	33